

Claims

[30020255 US]

1. An apparatus for the measurement of a power of an RF or MF signal, the apparatus comprising a resistive element for generating a thermal emission in response to an RF or MF signal incident thereon and an infra-red photodetector arranged for detection of the thermal emission generated by the resistive element and for generation of an output signal corresponding to the power of the incident RF or MF signal.
- 10 2. An apparatus as claimed in Claim 1, wherein amplification means is coupled to the infra-red photodetector to receive, when in use, the output signal and thereby generate an amplified signal.
- 15 3. An apparatus as claimed in Claim 1, wherein the infra-red photodetector and the resistive element are disposed within a substantially evacuated housing.
4. An apparatus as claimed in Claim 3, wherein the substantially evacuated housing comprises an internally silvered surface.
- 20 5. An apparatus as claimed in Claim 1, wherein the resistive element is a thin film chip resistor.
- 25 6. A method of measuring a power of an RF or MF signal, the method comprising the steps of:
 - generating a thermal emission by a resistive element in response to an incident RF or MF signal; and
 - detecting the thermal emission by an infra-red photodetector to generate an output signal corresponding to the power of the incident RF or
- 30 7. A method as claimed in Claim 6, further comprising the step of: amplifying the output signal.

8. A use of an infra-red photodetector for a measurement of an average power of an RF or MF signal.